Playing by Ear

Before we start learning how to play a song by ear, there are some things we need to define and explain:

Key: the tonality of a composition (song)

Chord: a simultaneous (at the same time) combination of at least three different pitches

Melody: a succession (series) of musical tones

Diatonic: the tones of a major or minor scale

Major Scale: a scale built from 2 whole steps, 1 half step, 3 whole steps, and 1 half step (or W W H W W W H)

99.9% of the time, the melody, chords, bass-lines, accompaniment, etc. will all be centered around one particular note or tonic. Some music is more tonal than others. Pop, blues, rock and country tend to be very stable in this regard. "Atonal" or "12 tone" music is on the extreme opposite end of this spectrum and we won't be studying it here. Think of the key as one particular note that all the other notes and chords dance around, point to or compliment. Every melody, bass line or chord progression that is played, points to a particular key. The key is like the title or idea of a song. If the title was, "Love Gone Wrong," your lyrics would probably be about a love that isn't going so hot. The lyrics would support the title. I know that sounds very elementary, but if you fully understand this concept it will help you TREMENDOUSLY.

Another example is if you had a report due, you would start with a thesis and all the other words, paragraphs and thoughts SHOULD support the thesis. If not, you would be considered to be "off the subject;" in musical terms you are falling out of the key.

So humor me for another moment yet…if your friends are sitting at a table talking about guitar and you pull up a chair and start talking about drums, things are going to get a little socially awkward. It's not to say that you could not reference drums as to how it might compare to guitars, but anything more than that and you are changing the subject. If your friends (the rest of the band or ensemble that you are playing with) decide not to change subjects (keys) with you, then you are going to be the odd man out, and YOU will be playing out of key. If you manage to get all those guitarists to start talking about drums, then you have managed to change the subject (key) for all your friends (band). Get it?

If you do reference drums and it pertains to the conversation regarding guitars, without intent of changing the subject, then musically we can do the same by suggesting another key temporarily without totally committing to that new key.

Often times a song will begin or end (or both) on the tonic, or "1" of the scale. This is often called the 1 chord, or 1 scale note.

Here is the method that I use when creating charts, melody lines, bass lines, or deciphering music by ear in any capacity:

1. Listen intently to a small part of the song you are trying to decipher.

Determining what melody or chords are being played will help you find what key the song is in. Finding out the key will make unlocking the rest of the song a breeze compared to NOT determining the key. It's the 1st thing that I always attempt to do when transcribing. You MUST be able to "hear" the note before trying to play it on your instrument. If I were to murmur something under my breath (that you can't accurately hear) and I ask you to repeat it, it would be a waste of time for you to guess at the infinite possibilities of what I COULD have said. So, normally you would ask me to repeat it, right? So when you are listening to a passage of music, you might need to listen to it over and over again until you can actually HEAR it accurately. Not being distracted by other noises (a friend trying to hum the melody or a T.V. on in the background, etc.) is also very important. I will even close my eyes so as to heighten my concentration on my aural sense (hearing) awareness. Hearing it right and playing it right are two TOTALLY different things so let's not rush this process.

The payoff for this learned skill is HUGE so don't give up, okay? The only thing that we are trying to do right now is hear, NOT play. Rushing this process WILL slow you down and hinder the "strengthening of your ear". If you feel you can't hear it correctly, try a smaller section of music, or use headphones or turn it up. Do something logical to get it "in your ears". Once you feel sure that you are hearing the passage correctly, proceed to step two. (If you are having difficulties, keep pressing on. It's in EVERYONE to have this ability. Be patient with yourself and take it from someone who used to have a TERRIBLE ear…YOU CAN DO THIS!!!)

2. Hum the vocal melody-line, bass-line (or some other part of the song you are trying to decipher). Once I feel I can "hear" the music selection, I attempt to hum it. This is a learned skill! I say this because some say that it is a gift (which is TOTALLY false and assumes a LOT of things). However, you will find that the more you practice, the better you get. Coincidence? Now the fun part! This can be a bit tricky if you are not used to humming or singing. The trick is to commit to the note that you are humming until you can successfully find it on your guitar. Take the first note of the series of notes and hum it – LOUD AND PROUD! That first note is crucial. If you are not convinced that you have the note, slide (sing it up and down in pitch) until you get it. Be aware/focused and limit distractions, especially other noises. NOW that you have

hummed the note correctly…

3. Find the note on the fret board.

How? Go fish! Yup, just play a note on the fret board, preferably in a place on the neck you think is logical. You probably won't be WAY up on the neck unless it's a high melody. If you don't luck out and get the note right off the bat, determine if the note that you are humming is higher or lower than the note being played. ATTENTION: This is the most important part of the puzzle with the exception of hearing the note correctly in step 1. You MUST determine the "highness" or "lowness" of the two pitches. This is where most people bail out, and try going back a step or going forward a step. Don't do it! It will only slow you down. This is the normal process for everyone in some capacity or another. Once you have determined that the played note is higher or lower than the hummed note, move your played note in the direction of your hummed note BY HALF STEPS (1 fret at a time). For example, if your hummed note is higher than your played note on the guitar, then you would move your played note UP by half steps slowly until the note is in unison (the same). For beginners, try moving up in half steps on 1 string. If you are not trained, changing strings will only confuse you.

If you don't find that first benchmark note, the other notes will be much harder to find, so don't skip any steps in this process. It seems tedious, but the more you do this the quicker you'll get. Whether you are really slow at this in the beginning or get REALLY quick over time, the process is the same. Like a speed-typist, the speed comes from methodically doing the correct steps EVERY time, not randomly doing some steps and hoping for a good outcome. That's called "dum" and that's not you. Yeah, I know I spelled it without the "b." Just making sure you are paying attention! And without the "b" it's EXTRA stupid. Gotcha again!

4. Find more notes on the fret board.

So once you get that first note, half the battle is done. Use the same method above to find the other notes. Another great practice is to take small "chunks" of music at a time. Like eating a meal, you don't take more than you can chew or swallow, so don't do that with musical passages, okay?

5. Determine the key.

The combination of whole steps and half steps will determine where your tonic or "1" is. Now, assuming you have a few notes that you have successfully "found" on the fret board due to your stellar humming skills, what do you do with them? Well, we are looking for a pattern, specifically the major scale. If you remember, the major scale pattern is WWHWWWH (whole-step, whole-step, half-step, whole-step, whole-step, whole-step, half-step) or (1 W 2 W 3 H 4 W 5 W 6 W 7 H 1) - where the numbers are the scale steps. A half-step remember, is the distance between one fret and the next. A whole-step is two half-steps.

SO, let's say the 3 notes that you have found show a pattern of WWH. DEAR WATSON, a clue…or three to be exact!! Here is where that WWH falls into our little major scale pattern from above: 1 W 2 W 3 H 4 W 5 W 6 W 7 H

Get it? So, in our example, there are **two places** that that pattern falls, so we are closer, but no cigar just yet. You are the detective and are looking for clues as to what key we are in. The song has the "fingerprints and DNA" of the key we are looking for, ALL OVER IT, but we have to look carefully, and jumping to conclusions could give us wrong answers. We need to get more notes from the song to determine where the "1" from the scale is. Let's say after further listening, humming and translating our hummed notes to the guitar, we find that the pattern now has a W before the initial WWH to create WWWH. Voila!! NOW, we are getting somewhere! Now we have WWWH and notice how there is only one of those in the following pattern: 1 W 2 W 3 H 4 W 5 W 6 W 7 H 1. That means that the note at the end of the WWWH would be the 1, tonic or key of the song. That is HUGE to know and I will show you why.

Once we have determined the key, we have a matrix of very possible chords and notes that will coincide with that particular key (the Nashville Number System chord matrix and major scale are examples of this). So for example, let's say after using the above method and determining that our song is in the key of C. Our chord "subset" or family of chords would MOST LIKELY be: C, D-, E-, F, G, A- and B dim (diminished). I say most likely, because it's not always the case, BUT it's a great place to start. Your ear will most likely tell you if a chord is different from that "rule of thumb" set of chords. So now that we know that these are the most probable chords that we should expect to see in our example song, we are not just grabbing chords randomly. Often times, that 7 chord WON'T be diminished, but will be a "flat 7" chord. So in the key of C, the B diminished would be a Bb Major. See what we did there? We flattened the B by one half-step, making it a Bb. Then we built a major chord off that Bb. Remember the "flat 7" chord. You will see it A LOT in pop, rock and country music.

As a side thought, when I am teaching my one-on-one students a song, I almost always pull up the video online. Often times, videos will show the artist as they are playing their guitars. Since the guitar is so versatile, the same melody or chord progression might have 3 or 4 possible solutions (ways to play it) on the neck. So it's helpful to notice where or if a capo is used, or where on the neck the guitarist is playing. This will all make more sense to you as you gradually learn this process.

6. Hum the bass notes to find your chord progression.

Using the above methods, once I have determined the key and have the subset of probable chords and notes, I listen to the bass notes. When I refer to the bass notes, I mean those notes that are played by the bass player or are in the lowest register of the composition. Basically, I am

listening to the lowest notes (in pitch). 9 times out of 10, the bass notes will tell you what the letter name of the chord is. Now mind you, there are many different methods people use to transcribe music by ear. The way that I'm showing you is one way, and for me is the easiest and most logical way. As you sharpen your own aural-awareness, you will most likely develop your own techniques and habits that are unique to you. Let's say for our example, that we hear the bass line play a C for 4 beats, a G for 4 beats, an A for 4 beats and an F for 4 beats. Remember our melody determined that we were in the key of C and that the associated chords for that key are C, D-, E-, F, G, A- and B dim (diminished). Remember that the bass note is only one note of the chord and does not determine the "flavor" of the chord like major, minor, diminished, 7th etc. So the four bass notes that we found, C, G, A and F would most likely represent chords C major, G major, A minor and F major. Could it be that the chords that are actually played in the song are different than that? Sure, but most likely not. They usually fit the matrix of the key that we are in.

The method that I just showed you was how I taught myself how to transcribe songs. For those of you just starting out, I would suggest going through each step. If you are finding success skipping some of these steps, then more power to you! However, *if you are having difficulty,* do them all. This is an incredible skill to develop and will SERIOUSLY revolutionize your playing. All of my students are different. Each comes with a unique skill set and way of learning. Now, when I sit down to transcribe a song for a student, I will usually jump straight to step 6 where I am humming the bass notes. From doing this process so much, I can usually determine what the tonic of the song is right away. Finding my bass notes tells me my chord progression and also tells me where I might put my capo to simplify the song.

Again, let me remind you that this is a learned skill. I hate even saying that one person might be naturally better at this than another because I don't want to give you an excuse to not learn this skill. It can be frustrating at first but if you are persistent, the rewards are great and every time you find a new note and new chord it's like finding a piece of gold. It's always helpful to start with a song that you are very familiar with and that you love. It will make this whole process a lot easier and more enjoyable.

Also, remember, regarding guitar and anything associated with art in general, there is no perfect way. It's all subjective and open to interpretation. I'm not saying that there are not definite notes or chords represented in the song, but that your method for determining those may be different than someone else's. Always be open to learning. In this way, you will always be increasing in skill and not grow stagnant.